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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/695,283

10/28/2003

Robert Richard Dykstra

9086M

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EXAMINER

MOSS, KERI A

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

12/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/695,283	Applicant(s) DYKSTRA ET AL.	
	Examiner KERI A. MOSS	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 21, 2008 has been entered.
2. Claims 1 and 6-9 are pending.

Response to Amendment

3. The previous rejection under 35 USC 112, 2nd paragraph is hereby withdrawn in light of applicants' amendments and arguments.

The previous rejection of claims 1 and 6-9 under 35 USC 103 have been modified in light of applicants' amendments and arguments.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rollat et al. (US Pub 2003/0017125) in view of Moore et al. (USP 5,866,110) and further in view of Trandai et al. (USP 5,585,092). Rollat teaches a non-encapsulated benefit agent delivery system comprising an aqueous dispersion [0017] of a water-insoluble polymer

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particle [0017] and a benefit agent [0053] wherein the polymer particle comprises at least one cationic monomer and one or more non-cationic monomers [0052]-[0053]. The polymer and the benefit agent are non-polymerically associated in a liquid matrix [0048]. The RF exhibited by the benefit agent is inherently at least about 1.5 as the benefit agent is one used by applicant in the instant invention. The polymer particle inherently has a first affinity for a low kovats index perfume raw material having a kovats index of from about 1000 to about 1400 and a second affinity for a high kovats index perfume raw material having a kovats index of greater than about 1700, the first affinity being at least about 2 times greater than the second affinity as measured by Affinity Test Protocol III, as the polymer particle is made as taught by applicants in the instantly claimed invention.

6. Rollat et al. teach that the composition contains thickening agents, which, like sodium sulfate, would adjust the viscosity of the composition ([0053]). Yet Rollat et al. do not name that thickening agent, and specifically do not teach that the composition comprises sodium sulfate.

7. Moore et al. teaches using sodium sulfate as a thickening agent for a benefit agent delivery system (Column 3 Tables 1 and 2). Moore further teaches that sodium sulfate adjusts the viscosity to a range between 5,000-11,000 cps. This is the preferred embodiment of the benefit agent delivery system. It would have been obvious for one of ordinary skill in the art to use sodium sulfate in a benefit agent delivery system in order to gain the predictable result of thickening the delivery agent and adjusting the viscosity to between 5,000-11,000 cps.

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8. Neither Rollat et al. nor Moore et al. teach a polymer particle having a glass transition temperature from about 50 degrees Celsius to about 150 degrees Celsius. The selection of glass transition temperatures of polymers are result effective variables. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) teaches that optimization of a result-effective variable is ordinarily within the skill of one in the art. A result-effective variable is one that has well-known and expected results. As demonstrated by Trandai et al., varying the glass transition temperature of polymers has the well-known and expected result of changing the state of the polymer and thereby the state of the aqueous dispersion, wherein a higher glass transition temperature results in a stiffer polymer particle and a more gel-like aqueous dispersion (Trandai, column 11 lines 24-44). The glass transition temperature of polymers may be increased by increasing the cross-linking (column 11 lines 8-44). Therefore, it would have been obvious to one of ordinary skill in the art to meet the glass transition temperature requirements of claimed polymer particle by modifying Rollat and Moore and selecting the glass transition temperature of about in order to have a stiffer polymer particle and a more gel-like aqueous dispersion.

9. Claims **1 and 6-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hood et al. (US Pub 2002/0058015 A1) in view of Rollat et al. (US Pub 23/0017125) and further in view of Moore et al. (USP 5,866,110) and further in view of Trandai et al. (USP 5,585092). Hood teaches a non-encapsulated benefit agent delivery system comprising an aqueous dispersion (abstract) of a water-insoluble polymer

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particle [0027] and a benefit agent [0020] wherein the polymer particle comprises at least one cationic monomer and one or more non-cationic monomers [0027]. The polymer and the benefit agent are non-polymerically associated in a liquid matrix [0027]. The RF exhibited by the benefit agent is inherently at least about 1.5 as the benefit agent is one used by applicant in the instant invention. The polymer particle inherently has a first affinity for a low kovats index perfume raw material having a kovats index of from about 1000 to about 1400 and a second affinity for a high kovats index perfume raw material having a kovats index of greater than about 1700, the first affinity being at least about 2 times greater than the second affinity as measured by Affinity Test Protocol III, as the polymer particle is made as taught by applicants in the instantly claimed invention. The LKI perfume raw materials collectively provide a first Average Response Factor (ARF_{LKI}) and the HKI perfume raw materials collectively provide a second Average Response Factor (ARF_{HKI}); the perfume polymeric particle having a ratio of ARF_{LKI}/ARF_{HKI} of at least about 1.2 (Examples 13 and 17).

Hood teaches a method for making a granular or liquid composition containing a non-encapsulated benefit agent delivery system comprising at least one cationic monomer and one or more non-cationic monomers to the matrix and adding a benefit agent selected from the group consisting of flavor ingredients and perfume raw materials and mixtures thereof to the matrix; wherein the polymer particle and benefit agent are added as separate, discrete components from different sources to form the benefit delivery system and are not polymerically associated in said system (Examples 13 and 17).

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Hood does not expressly teach that the dispersion additionally comprises a colloidal stabilizer.

Rollat et al teaches the use of colloidal silica in order to sterically stabilize polymer particles in a dispersion [0048]. This colloidal stabilizer limits the particles' coalescence and yields uniform particles, thereby preventing aggregation of the particles and enabling a more homogeneous dispersion [0048]. It would have been obvious for one of ordinary skill in the art to modify the benefit agent delivery system of Hood by adding a colloidal stabilizer as taught by Rollat in order to sterically stabilize the particles and prevent aggregation in order to ensure a more homogenous dispersion.

10. Rollat et al. teach that the benefit agent delivery system contains thickening agents, which, like sodium sulfate, would adjust the viscosity of the composition ([0053]). Yet Rollat et al. do not name that thickening agent, and specifically do not teach that the composition comprises sodium sulfate.

11. Moore et al. teaches using sodium sulfate as a thickening agent for a benefit agent delivery system (Column 3 Tables 1 and 2). Moore further teaches that sodium sulfate adjusts the viscosity to a range between 5,000-11,000 cps. This is the preferred embodiment of the benefit agent delivery system. It would have been obvious for one of ordinary skill in the art to use sodium sulfate in a benefit agent delivery system in order to gain the predictable result of thickening the delivery agent and adjusting the viscosity to between 5,000-11,000 cps.

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12. Neither Hood et al., Rollat et al. nor Moore et al. teach a polymer particle having a glass transition temperature from about 50 degrees Celsius to about 150 degrees Celsius. The selection of glass transition temperatures of polymers are result effective variables. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) teaches that optimization of a result-effective variable is ordinarily within the skill of one in the art. A result-effective variable is one that has well-known and expected results. As demonstrated by Trandai et al., varying the glass transition temperature of polymers has the well-known and expected result of changing the state of the polymer and thereby the state of the aqueous dispersion, wherein a higher glass transition temperature results in a stiffer polymer particle and a more gel-like aqueous dispersion (Trandai, column 11 lines 24-44). The glass transition temperature of polymers may be increased by increasing the cross-linking (column 11 lines 8-44). Therefore, it would have been obvious to one of ordinary skill in the art to meet the glass transition temperature requirements of claimed polymer particle by modifying Rollat and Moore and selecting the glass transition temperature of about in order to have a stiffer polymer particle and a more gel-like aqueous dispersion.

Response to Arguments

13. Applicant's arguments, see Request for Continued Examination, filed October 21, 2008, with respect to the rejection(s) of claim(s) 1 and 6-9 under Rollat et al, Moore et al. and Hood et al. have been fully considered and are persuasive. Therefore, in

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response to applicants' amendments and arguments, the rejection has been modified with the reference Trandai et al. (USP 5,585,092).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KERI A. MOSS whose telephone number is (571)272-8267. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)272-1700. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Keri A. Moss/
Examiner, Art Unit 1797

/Jill Warden/
Supervisory Patent Examiner, Art Unit 1797

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